

G. TYPHOON GEORGIA 07 SEP 2300Z-14 SEP 2300Z

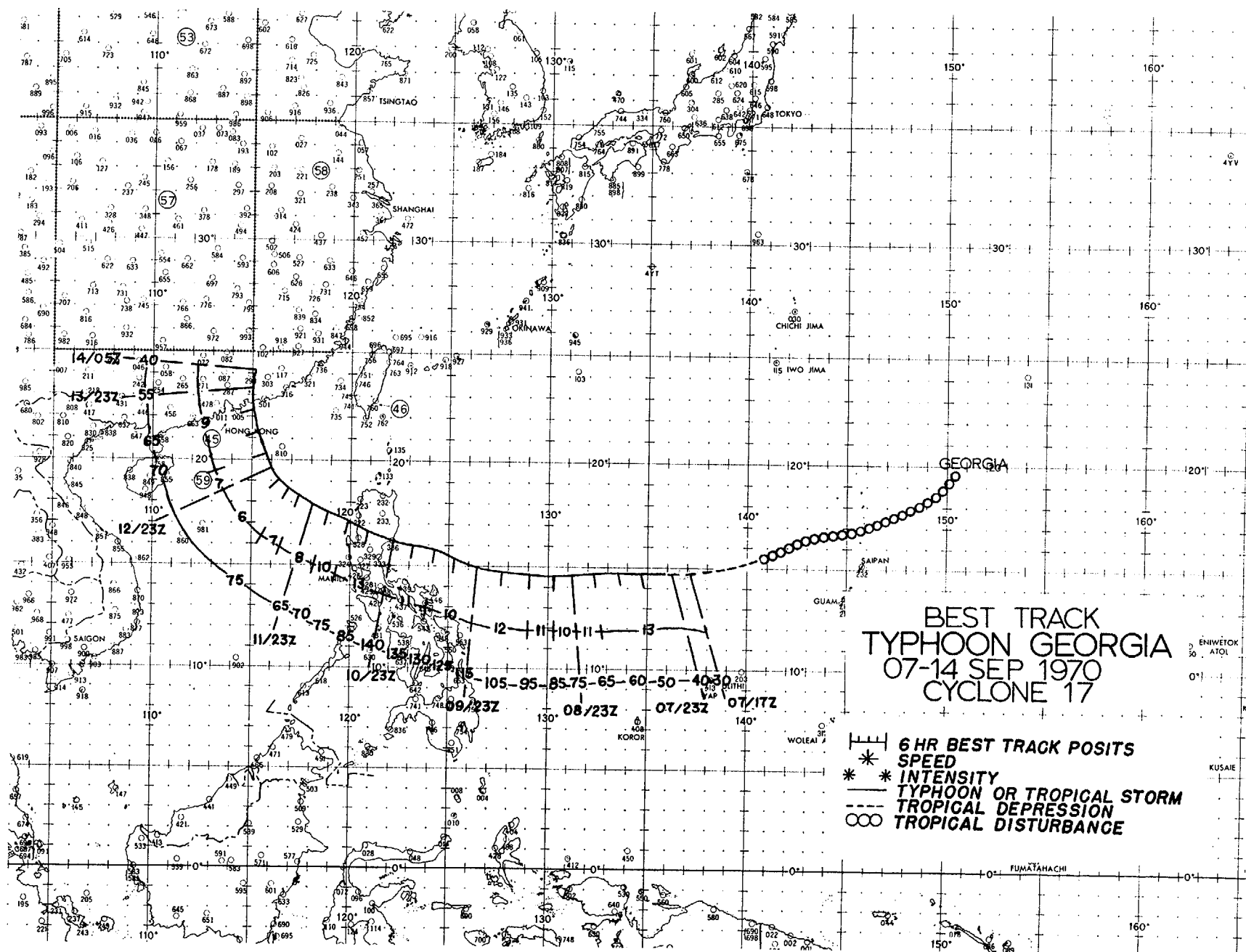
1. STATISTICS

- a. Number of Warnings Issued - 26
- b. Number of Warnings with Typhoon Intensity - 19
- c. Distance Traveled During Warning Period - 1,718 MI

2. CHARACTERISTICS

- a. Minimum Observed SLP - 904 MBS at 10/2040Z
- b. Minimum Observed 700 MB Height - 2390 M at 10/0600Z
- c. Maximum Surface Wind - 140 KTS (From Best Track)
- d. Maximum Radius of Surface Circulation - 360 MI

5-52



3. TYPHOON GEORGIA NARRATIVE

An ITOS-1 photograph on the 4th indicated that an upper tropospheric circulation in existence west of Marcus Island had developed a significant increase in convective activity along its southern periphery. The disturbance drifted southwestward toward the northern Marianas with an induced trough appearing on the 0000GMT surface chart on September 5th. The system continued on its southwestward track with a small surface circulation forming west of the Marianas a day later. An aerial reconnaissance investigation on the 8th revealed that tropical storm force had been reached and the first warning on Georgia was issued (Figure 5-13).

The storm began a westward march at 11 to 13 knots across the Philippine Sea as guided by the southern boundary of the subtropical ridge. Typhoon force was achieved early the next morning as diffluent equatorward flow over the storm, from the 200 mb ridge extension south of Japan, favored further deepening.

Early on the 10th Georgia began to shift to a slightly more west northwest track, and that evening, as she neared the Luzon coastline, maximum winds occurring near the center reached super typhoon force near 140 knots. The ITOS-1 satellite showed a tightly organized ring of convective activity surrounding the storm near this time (Figure 5-14). This was further evidenced in the fact that Casiguran Weather Bureau Station on the Luzon coast, 90 miles from the center, had yet to experience gale force winds although the typhoon was only 6 hours from landfall. A reconnaissance aircraft in the 10 mile diameter eye of Georgia, a few hours before she struck shore, recorded an extremely warm 500 mb temperature of 14.5°C and indicated the deepening trend had reached 904 mb.

The typhoon slammed into North Central Luzon during the early morning hours of the 11th near Cape San Ildefonso. Extensive damage was suffered at Casiguran, which was 15 N.M. north of the center at landfall, and several surrounding small villages along the coastline. Minimum pressure at Casiguran was reported at 977.5 mb with winds estimated at 120 knots. By contrast the storm did not produce excessive torrential rains but was relatively dry with only 5.44 inches recorded during its passage at the weather station. Ninety-five persons were killed during the onslaught and an additional 80 people reported missing. Property damage was fixed near 1.4 million dollars.

The storm continued on a west northwest track across Luzon and emerged into the South China Sea 12 hours later of minimum typhoon strength due to the disrupting mountainous terrain of the island. A weakness in the ridgeline over China

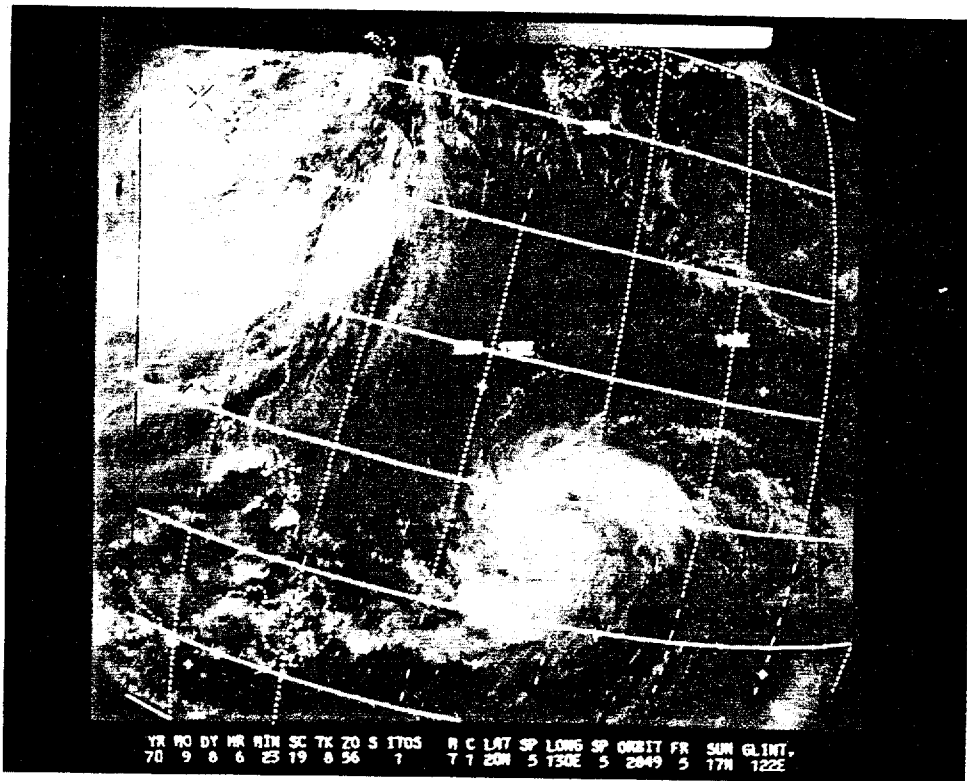


FIGURE 5-13 ITOS-1 PHOTO OF GEORGIA AS A DEVELOPING TROPICAL STORM ON 8 SEPTEMBER.

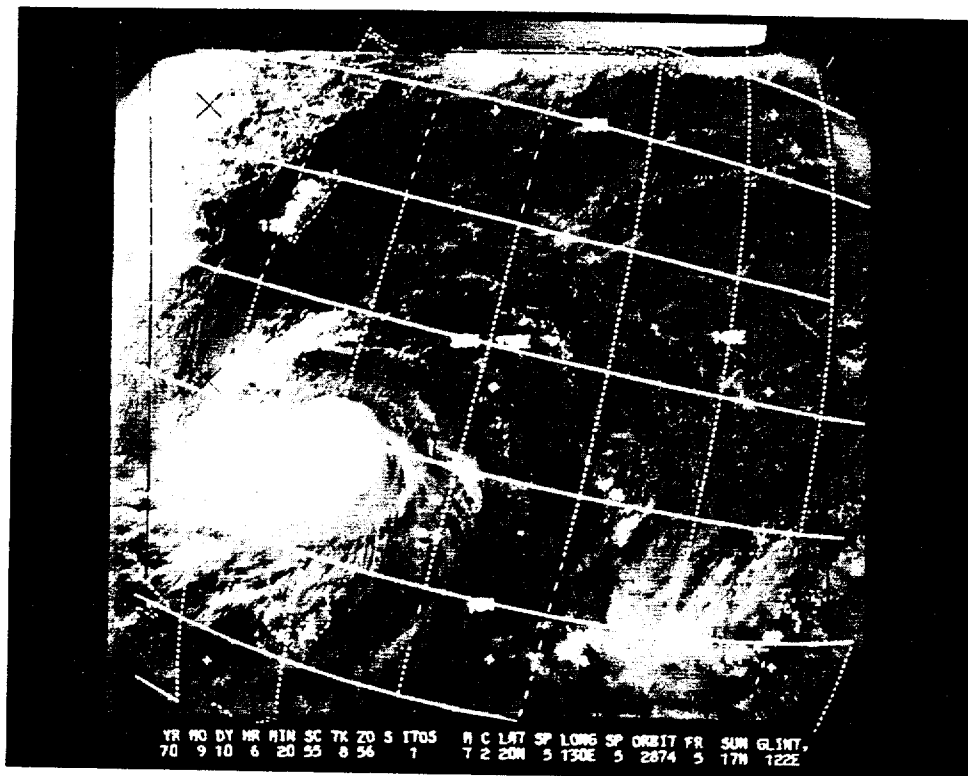


FIGURE 5-14 SUPER TYPHOON GEORGIA AS VIEWED BY ITOS-1 ON 10 SEPTEMBER JUST EAST OF LUZON.

provided a path for Georgia to recurve on a northward course with ultimate landfall occurring some 70 miles east of Hong Kong on the 14th.

The storm's intensity remained near 70 to 75 knots during its trek across the South China Sea while its eye was noted by reconnaissance crews to have expanded to some 70 miles in diameter.

By the 13th the storm came under surveillance of the radar at the Royal Observatory at Hong Kong and was later observed to cross the South China coast the following morning. Maximum gusts of 59 knots occurred at the Hong Kong International Airport while peak gusts of 56 knots were registered at the Royal Observatory. Georgia weakened rapidly after landfall and dissipated over land.

TYPHOON GEORGIA													
EYE FIXES CYCLONE													
FIX NO.	TIME	POSIT	UNIT- MET. OJD -ACCY	FLT LVL	FLT LVL WIND	OBS SFC (MINS)	OAS MIN SLP	MIN 700MB HGT	FLT LVL TT/10	EYE FORM	ORIENT- TATION	EYE DIA	CHARACTER WALL CLOUD
1	070526Z	14.0N 139.7E	SLT.S	STG B	01A	--	CAT 1						
2	080130Z	14.7N 135.6E	54-0-05---	700MB	030	040	000	3057	11/09	CIRC	----	--	W/C N-SE
3	080330Z	14.6N 135.1E	54-0-05---	700MB	040	025	995	3057	13/08	CIRC	----	--	W/C N-SE
4	080623Z	14.5N 135.0E	SLT.S	STG C	01A	--	CAT 1						
5	081015Z	14.7N 133.9E	VW-0-03---	700MB	042	--	000	3066	14/09	----			W/C NW-S
6	081402Z	14.8N 132.9E	VW-0-05---	700MB	055	--	993	3039	16/09	ELIP	N-S	--X--	5-7NM THK, OPEN E-W
7	082100Z	14.7N 131.5E	54-0-20---	700MB	050	--	943	2978	14/10	CIRC	----	24	CLSD, SML BRKS N QUAD
8	080300Z	14.3N 130.7E	54-0-10---	700MB	070	090	975	2908	16/09	CIRC	----	14	CLSD 4NM THK
9	090715Z	14.5N 130.0E	SLT.S	STG X	01A	07	CAT 2						
10	091335Z	14.0N 128.6E	VW-0-05---	700MB	042	--	000		--/--	----			
11	091438Z	14.7N 128.1E	VW-0-05---	700MB	040	--	976	2728	21/13	CIRC	----	19	4NM THK, OPEN NW QUAD
12	091535Z	14.7N 127.8E	VW-0-05---	700MB	040	--	976	2728	21/13	CIRC	----	18	3NM THK, OPEN N QUAD
13	092100Z	14.8N 126.7E	54-0-03---	700MB	100	110	937	2554	22/09	CIRC	----	16	CLSD 3NM THK
14	100000Z	15.2N 126.4E	LND RDR						--/--	----			
15	100105Z	14.8N 126.5E	ACFI RDR	300MB					--/--	CONC		40-20	OUTER-CLSD, INNER-CLSD
16	100300Z	15.2N 125.5E	54-0-05---	700MB	080	130	927	2451	19/09	CIRC	----	14	CLSD 3NM THK
17	100600Z	15.2N 125.2E	54-0-05---	700MB	095	130	920	2390	17/11	CIRC	----	12	CLSD 3NM THK
18	100621Z	15.0N 124.5E	SLT.S	STG X	01A	03	CAT 4						
19	100830Z	15.5N 124.5E	LND RDR						--/--	----			
20	100906Z	15.6N 124.6E	54-0-05---	400MB					--/--	CIRC	----	15	CLSD 3NM THK
21	100908Z	15.5N 124.6E	VW-0-10---		050	085			--/--	CIRC	----	12	CLSD 4NM THK
22	101030Z	15.7N 124.5E	LND RDR						--/--	----			
23	101110Z	15.6N 124.2E	LND RDR						--/--	----			
24	101200Z	15.5N 124.3E	VW-0-10---		045				--/--	CIRC	----	12	CLSD 4NM THK
25	101230Z	15.7N 124.2E	LND RDR						--/--	----			
26	101530Z	15.8N 123.4E	LND RDR						--/--	----			
27	101600Z	15.8N 123.3E	LND RDR						--/--	----			
28	101630Z	15.9N 123.3E	VW-0-02---						--/--	CIRC	----	12	CLSD 4NM THK
29	101725Z	15.9N 123.1E	VW-0-03---						--/--	CIRC	----	12	CLSD
30	101730Z	15.0N 123.0E	LND RDR						--/--	----			
31	101830Z	16.0N 122.8E	LND RDR						--/--	----			
32	101900Z	16.0N 122.7E	LND RDR						--/--	----			
33	102000Z	16.0N 122.6E	LND RDR						--/--	----			
34	102040Z	15.9N 122.4E	54-0-03---	500MB	080	--			15/01	CIRC	----	10	CLSD
35	10245Z	16.6N 121.3E	54-0-10---	500MB					--/--	CIRC	----	5	CLSD ON RDR
36	10717Z	17.5N 120.0E	SLT.S	STG X	01A	05	CAT 2						
37	10930Z	17.3N 119.9E	VW-0-25---			055			--/--	----			
38	111400Z	17.6N 119.1E	VW-0-20---			060			--/--	----			NEG WALL
39	112100Z	17.5N 117.8E	54-0-05---	700MB	055	--	984	2984	15/13	CIRC	----	25	ILL DEFINED
40	120100Z	18.0N 117.8E	54-0-05---	700MB	065	040	983	2957	15/13	----			CLSD
41	120619Z	18.0N 116.5E	SLT.S	STG X	01A	05	CAT 3						NEG W/C
42	120910Z	18.5N 117.1E	VW-0-03---			080	975		26/23	CIRC	----	75	NEG W/C
43	121515Z	19.3N 116.3E	VW-0-06---		040	--	982	2969	23/18	ELIP	NW-SE	85X70	NEG W/C
44	122110Z	19.8N 116.1E	54-0-05---	700MB	065	--	973	2890	18/13	CIRC	----	45	OPEN S
45	130010Z	19.8N 116.0E	54-0-05---	700MB	065	060	974	2887	17/12	CIRC	----	40	OPEN NE 8NM THK
46	130240Z	20.0N 115.9E	54-0-05---	700MB	085	050	974	2987	17/12	CIRC	----	40	CENTER OPEN NE
47	130715Z	20.5N 115.5E	SLT.S	STG X	01A	05	CAT 2						
48	130905Z	20.7N 115.5E	VW-0-15---		05	055			--/--	ELIP	NW-SE	99X88	CENTER OPEN NW
49	131200Z	21.5N 115.7E	VW-0-15---						--/--	----			

TYPHOON GEORGIA

TROPICAL CYCLONE 17 -- 9/7/1700Z TO 9/14/0500Z
POSITION AND FORECAST VERIFICATION DATA

WARN NO.	DTG	WARNING POSIT		BEST TRACK		24 HR FCST		24 HR ERROR		48 HR FCST		48 HR ERROR		72 HR FCST		72 HR ERROR	
		LAT	LONG	LAT	LONG	LAT	LONG	DEG	DIST	LAT	LONG	DEG	DIST	LAT	LONG	DEG	DIST
01	07/2300Z	14.5N	136.0E	14.6N	136.1E	15.7N	132.9E	054	0120	-----	-----	-----	-----	-----	-----	-----	-----
02	08/0500Z	14.7N	134.9E	14.6N	134.8E	15.8N	131.0E	027	0090	17.5N	128.2E	049	0204	-----	-----	-----	-----
03	08/1100Z	14.7N	133.7E	14.6N	133.6E	14.9N	129.3E	027	0024	16.4N	125.5E	051	0084	18.8N	122.2E	051	0168
04	08/1700Z	14.7N	132.2E	14.7N	132.3E	15.4N	127.6E	360	0042	17.3N	124.0E	026	0096	-----	-----	-----	-----
05	08/2300Z	14.7N	131.1E	14.5N	131.2E	15.2N	126.3E	360	0018	16.8N	122.5E	021	0048	19.2N	119.2E	036	0102
06	09/0500Z	14.4N	130.3E	14.4N	130.2E	14.5N	126.0E	144	0048	15.8N	122.1E	126	0078	-----	-----	-----	-----
07	09/1100Z	14.3N	129.3E	14.5N	129.0E	14.6N	125.4E	131	0078	15.7N	121.8E	124	0138	17.1N	118.3E	138	0126
08	09/1700Z	14.7N	127.6E	14.7N	127.7E	15.2N	123.3E	170	0036	16.4N	119.9E	134	0084	-----	-----	-----	-----
09	09/2300Z	14.8N	126.3E	14.9N	126.4E	15.7N	121.7E	226	0024	17.4N	118.0E	180	0024	20.0N	114.8E	289	0066
10	10/0500Z	15.2N	125.1E	15.2N	125.4E	17.5N	120.9E	000	0054	19.4N	117.3E	000	0066	-----	-----	-----	-----
11	10/1100Z	15.7N	124.3E	15.5N	124.3E	17.6N	120.7E	054	0060	19.6N	117.0E	013	0054	22.2N	113.8E	305	0102
12	10/1700Z	16.2N	123.4E	15.8N	123.2E	18.1N	119.7E	049	0060	20.2N	116.1E	349	0066	-----	-----	-----	-----
13	10/2300Z	16.2N	122.1E	16.0N	122.1E	18.3N	118.3E	022	0030	21.1N	115.2E	334	0096	24.6N	113.3E	309	0132
14	11/0500Z	16.7N	121.0E	16.6N	120.9E	18.7N	117.1E	345	0024	21.2N	113.9E	299	0108	-----	-----	-----	-----
15	11/1100Z	17.3N	119.9E	17.0N	119.8E	19.3N	116.3E	326	0042	22.0N	113.1E	290	0132	-----	-----	-----	-----
16	11/1700Z	17.9N	118.6E	17.4N	118.8E	20.3N	115.0E	312	0102	23.2N	112.0E	289	0180	-----	-----	-----	-----
17	11/2300Z	17.9N	118.1E	17.8N	118.1E	19.4N	114.6E	262	0078	21.5N	111.4E	245	0228	-----	-----	-----	-----
18	12/0500Z	18.2N	117.3E	18.3N	117.3E	19.6N	114.2E	244	0090	21.7N	111.1E	238	0264	-----	-----	-----	-----
19	12/1100Z	18.4N	116.9E	18.7N	116.8E	19.7N	114.2E	217	0108	21.5N	111.4E	-----	-----	-----	-----	-----	-----
20	12/1700Z	19.0N	116.2E	19.1N	116.4E	20.8N	113.4E	229	0126	23.4N	110.8E	-----	-----	-----	-----	-----	-----
21	12/2300Z	19.7N	116.1E	19.6N	116.0E	20.8N	115.5E	175	0144	22.9N	114.4E	-----	-----	-----	-----	-----	-----
22	13/0500Z	20.1N	115.8E	20.3N	115.7E	22.0N	115.1E	180	0126	-----	-----	-----	-----	-----	-----	-----	-----
23	13/1100Z	20.7N	115.5E	21.2N	115.4E	23.1N	114.8E	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
24	13/1700Z	21.5N	115.3E	22.2N	115.2E	24.8N	115.0E	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
25	13/2300Z	22.9N	115.2E	23.2N	115.2E	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
26	14/0500Z	23.6N	115.1E	24.1N	115.2E	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

AVERAGE 24 HOUR ERROR - 0069 MI.
AVERAGE 48 HOUR ERROR - 0114 MI.
AVERAGE 72 HOUR ERROR - 0116 MI.